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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,070	02/26/2000	Merrill A Biel	22272-14	8621

7590 04/07/2003
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EXAMINER

SHAY, DAVID M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

69/514,070

Applicant(s)

Briel

Examiner

J-shay

Group Art Unit

3739

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE — 3 — MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on February 11, 2003.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 50-53 & 55-59 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 50-53 & 55-59 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

The amendment after final filed February 11, 2003 has been entered.

Claims 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al in combination with Singer et al. Lai et al teach a method of cellular disruption as claimed except for the specific concentration of SDS (column 6, line 36 to column 19, lines 67). Singer et al teach that at concentrations of SDS below that at which produces complete cell lysis occurs, cell permeability is greatly increased. It would have been obvious to the artisan of ordinary skill to employ an SDS concentration as claimed, since Singer et al give no minimum concentration below which the "cell permeability is greatly increased" as this happens at any concentration below that at which cell lysis occurs, as taught by Singer et al, and since this would reduce the extent to which non-cancerous cells are affected.

Claims 55 and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz et al in combination with Asculai et al, Singer et al, and Williams et al. Swartz et al teaches method such as claimed except the use of a surfactant (please note the absence of teaching of the use of a surfactant necessarily includes the absence of limitations predicated on the use of a surfactant e.g. the use of a particular concentration of surfactant) and gives few particulars regarding light application. Asculai et al teach the usefulness of surfactants for inactivating viruses. Singer et al teach that SDS permeabilizes membranes greatly at concentrations below that at which total lysis occurs. Williams et al teach controlling gel properties through the use of surfactants. It would have been obvious to the artisan of ordinary skill to employ a surfactant in the method of Swartz et al since this would help inactivate the viruses, as taught by Asculai et al as well as to control gel properties, as taught by Williams et al;

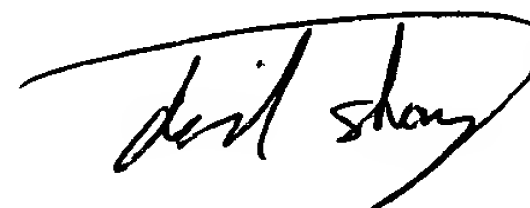
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to use the claimed concentrations, since there will permeabilize the membranes by attacking the lipids therein, as taught by Singer et al, thus producing a method such as claimed.

Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz et al in combination with Asculai et al, Singer et al and William et al as applied to claims 55 and 57-59 above, and further in view of Lai et al. Lai et al teach light dosages and dosage rates as claimed for activating a surfactant/photosensitizer mixture. It would have been obvious to the artisan of ordinary skill to employ the dosage and dosage rate as taught by Lai et al, since these will activate the photosensitizer and since Swartz et al supply no particular dosages or dosage rates, thus producing a method such as claimed.

Applicant's arguments with respect to claims 50-54 and 55-59 are have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to David Shay at telephone number 703-308-2215.



Shay/DI

March 21, 2003

DAVID M. SHAY
PRIMARY EXAMINER
GROUP 330